

**Supplementary Figure 1.** Validity and reliability in frontal and temporal ROIs of (a) sentence completion, (b) picture naming, (c) naturalistic comprehension, and (d) narrative comprehension. The left column shows laterality indices and the right column shows Dice coefficients of similarity. Within each matrix, absolute and relative threshold choices are shown on the *y* axis, and cluster size cutoffs and regions of interest (frontal and temporal) on the *x* axis. Grey crosses indicate that one or more laterality indices were undefined for one or more participants, in which case the reported means exclude those scans. Empty cells (white) indicate that all laterality indices were undefined in all participants.